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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT PAPER NUMBER

2686

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/078;008

Applicant(s)

ARAZI ET AL.

Examiner

Joy K Contee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,7,9 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1,4,7,9 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remarks

1. Applicant's remarks with respect to claims 1,4,7,9 and 14-17 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

2. The indicated allowability of claims 14-17 is withdrawn in view of the newly discovered reference to Brody et al. Rejections based on the newly cited reference follow.

3. Claims 12-13 are allowed.

Note: After reconsidering the claim language (see claim 1) Examiner has interpreted "selected from the group consisting of" as "at least one of" many, which does not require having the entire "group" read into the limitation.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

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directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Rinne et al. (Rinne), U.S. Patent No. 6,259,685, previously used.

Regarding claim 1, Rinne discloses in a wireless communication system comprising a plurality of base stations and at least one switch in communication with the base stations, a method of synchronizing at least one neighboring base station to a base station connected with a mobile unit comprising:

from the base station connected with the mobile unit (col. 5, lines 31-36), periodically transmitting during a selected time interval (i.e., reads on time slot) with higher transmission power than during normal transmission (col. 7, lines 3-40); and

receiving the transmission with higher transmission power at the at least one neighboring base station (col. 10, lines 38-43); wherein the mobile unit is a device selected from the group (i.e., reads on alternative choice from the list of devices) consisting of: cellular telephone handset (col. 7, lines 29-48).

6. Claims 4, 7, 9, rejected under 35 U.S.C. 103(a) as being unpatentable over Rinne, in view of Gatherer et al. (Gatherer), U.S. Patent No. 6,396,457, previously used.

Regarding claim 4, Rinne discloses a method according to claim 1, but fails to disclose wherein the mobile unit is equipped with a short-range wireless communication transmitter/receiver.

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In a similar field of endeavor, Gatherer discloses wherein inherently the mobile unit is equipped with a short-range wireless communication (i.e., reads on Bluetooth capability in Bluetooth network) transmitter/receiver (col. 8, lines 6-12).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Rinne to include mobile units with Bluetooth capability for the purpose of utilizing short-range wireless communication with a nearby base station.

Regarding claim 7, Rinne discloses the method according to claim 1, but fails to disclose, wherein the base stations and the switch are connected via a wired or wireless local area.

Gatherer further discloses wherein the base stations and the switch are connected via a wired or wireless local area (col. 3, lines 1-31 and col. 8, lines 6-24).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Rinne to include base stations and switch in wired or wireless local loop environment for the purpose of increasing the utilization of the aggregate communication capacity provided by the ad hoc networks in the wireless LAN.

Regarding claim 9, Rinne discloses a method according to claim 1, but fails to disclose wherein: the wireless communication system comprises a wireless private branch exchange handling calls from mobile units comprising handsets.

Gatherer further suggests the wireless communication system comprising a wireless private branch exchange handling calls from mobile units comprising handsets (reads on typical Bluetooth master devices described in col. 1, lines 54-59).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Rinne to include base stations and switch in wired or wireless local loop environment for the purpose of increasing the utilization of the aggregate communication capacity provided by the ad hoc networks in the wireless LAN, in a Bluetooth network (col. 8, lines 4-23).

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rinne, in view of Brody et al. (Brody), U.S. Patent No. 4,670,899.

Regarding claim 15, Rinne discloses in a wireless communication system comprising a plurality of base stations and at least one switch in communication with the base stations, a method of synchronizing at least one neighboring base station to a base station connected with a mobile unit comprising:

from the base station connected with the mobile unit (col. 5, lines 31-36), periodically transmitting during a selected time interval (i.e., reads on time slot) with higher transmission power than during normal transmission (col. 7, lines 3-40); and

receiving the transmission with higher transmission power at the at least one neighboring base station (col. 10, lines 38-43); wherein a first plurality of base stations are connected to a first switch; and a second plurality of base stations are connected to a second switch (col. 1, lines 24-40 and col. 7, lines 29-48).

Rinne fails to explicitly disclose wherein the switches maintain status tables for calls and connections that they are handling and maintain copies of each other's status tables; and when a switch updates one of its status tables, it sends the updated status table to the other switches.

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In a similar field of endeavor, Brody discloses wherein the switches maintain status tables for calls and connections that they are handling and maintain copies of each other's status tables (col. 14, lines 4-21); and when a switch updates one of its status tables, it sends the updated status table to the other switches (col. 13, line 37 to col. 14, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Rinne to include status tables and sharing among switches and updating thereof for the purpose of providing a load balancing technique which allows for effective traffic handling (see Brody, col. 26, lines 8-39).

8. Claims 14, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinne, in view of Emery et al. (Emery), U.S. Patent No. 6,011,975.

Regarding claims 14, 16 and 17, Rinne discloses in a wireless communication system comprising a plurality of base stations and at least one switch in communication with the base stations, a method of synchronizing at least one neighboring base station to a base station connected with a mobile unit comprising:

from the base station connected with the mobile unit (col. 5, lines 31-36), periodically transmitting during a selected time interval (i.e., reads on time slot) with higher transmission power than during normal transmission (col. 7, lines 3-40); and

receiving the transmission with higher transmission power at the at least one neighboring base station (col. 10, lines 38-43); wherein a first plurality of base stations are connected to a first switch; and a second plurality of base stations are connected to a second switch (col. 1, lines 24-40 and col. 7, lines 29-48).

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Rinne fails to explicitly disclose wherein the wireless communication system comprises a WPBX handling calls from mobile units comprising handsets, the method further comprising: in the switch, for each call, maintaining a table of connections comprising information selected from the group consisting of current base station ID (and maintaining a table of calls being handled by the WPBX comprising information selected from the group consisting of destination base station identification).

In a similar field of endeavor, Emery discloses wherein the wireless communication system comprises a WPBX handling calls from mobile units comprising handsets, the method further comprising: in the switch, for each call, maintaining a table of connections comprising information selected from the group consisting of handle of low-level protocols (and maintaining a table of calls being handled by the WPBX comprising information selected from the group consisting of calling number identification) (col. 25, lines 14-60)

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Rinne to include integration of wireline and wireless for the purpose of providing communication services via both land based and radio links in a transparent way across boundaries of the different networks (see Emery, col. 7, lines 52-60).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on M (alternating), T & Th, 5:30 a.m. to 2:00 p.m.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JC

1/10/05


CHARLES APPIAH
PRIMARY EXAMINER